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Issue #83:2

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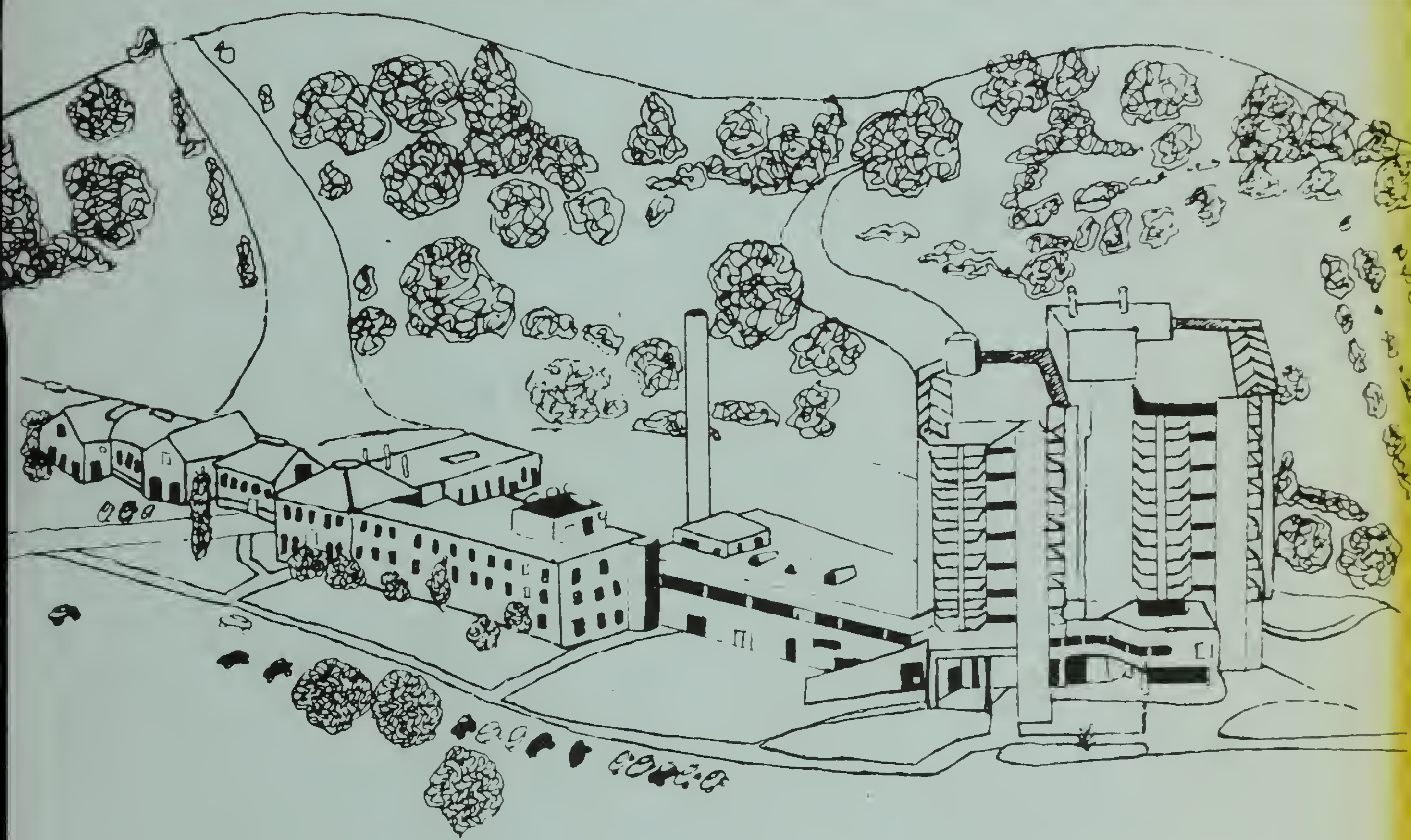

MASS STATE LABORATORY INSTITUTE. The Bussey Building, site of the earliest antitoxin and vaccine production activities (1894) and diagnostic services (1895), was replaced in 1974 by the 8-story State Laboratory Institute Building illustrated above. Remaining structures built in intervening years (shown from left in illustration) are the stables and Biologic Laboratories (1904) with additions in 1918, 1929, 1946 and 1956. The institute is named in honor of Theobald Smith, the great American microbiologist who was the first Director of the Antitoxin and Vaccine Laboratory (1895-1914).

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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC HEALTH

LAB NEWS

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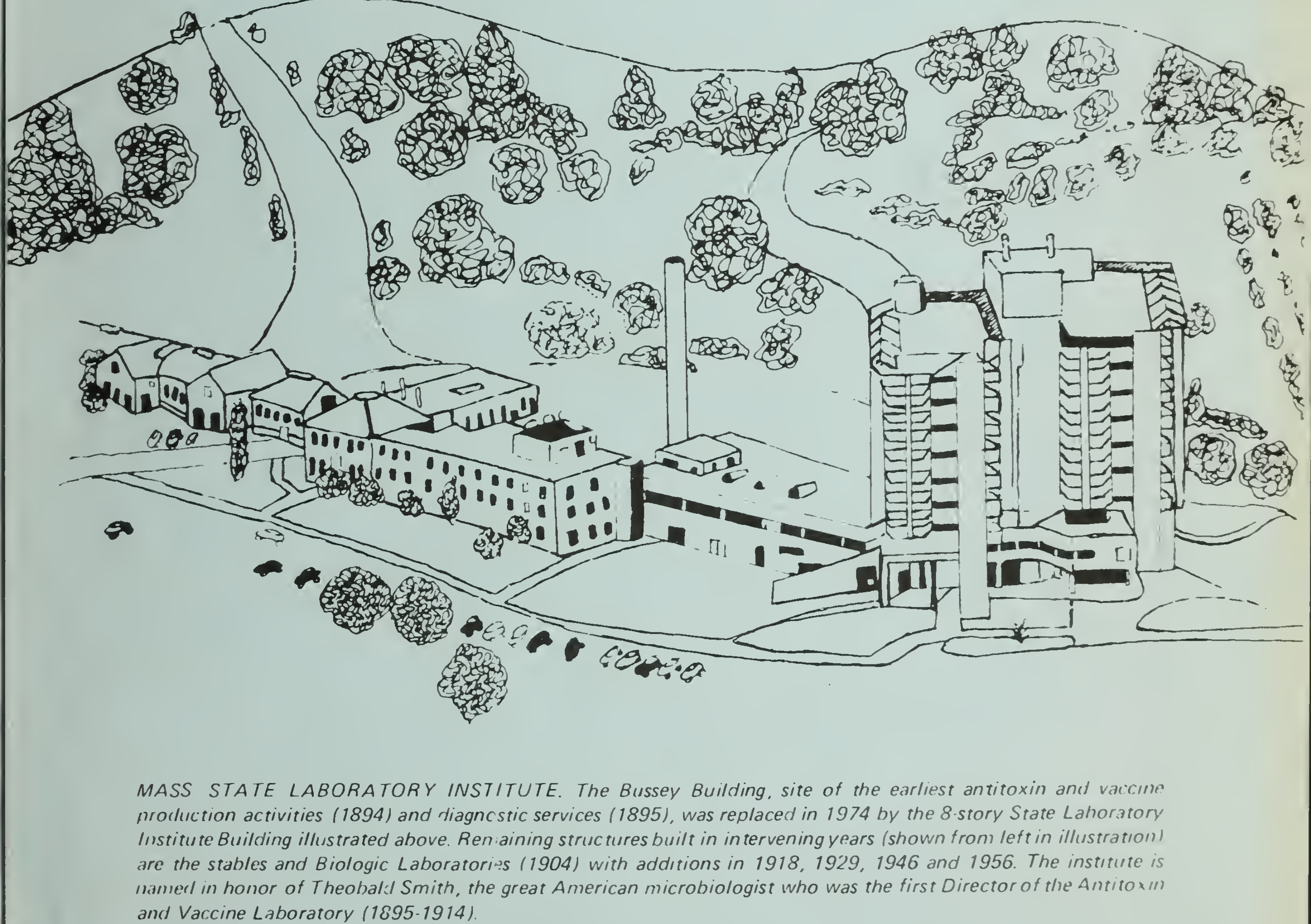

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State Laboratory Institute
George F. Grady, M.D.
Director

Executive Office of Human Services
Manuel Carbello, Ph.D.
Secretary

Massachusetts Department of Public Health
Bailus Walker, Ph.D., M.P.H.
Commissioner

Commonwealth of Massachusetts
Michael Dukakis
Governor

****

LAB NEWS

1983 Series (Summer)

Issue #83:2

Doris L. Johnson
Editor

Helen Walsh
Assistant to the Editor

We are also grateful to Dr. Barbara Rosenau for her assistance in the preparation of this issue.

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LAB NEWS is published quarterly by the Massachusetts State Laboratory Institute. Please address all correspondence to Doris L. Johnson, Editor, Massachusetts State Laboratory Institute, 305 South Street, Jamaica Plain, MA 02130

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PLEASE NOTE: As the circulation of LAB NEWS is limited to one copy for each clinical laboratory in Massachusetts, it is requested that this copy be shared with as many employees of your laboratory as possible. Thank you.

BAILUS WALKER, JR., PH.D., M.P.H. - NEW COMMISSIONER OF PUBLIC HEALTH

We at the State Laboratory Institute cordially welcome Dr. Bailus Walker to his new position as Commissioner of Public Health for the Commonwealth of Massachusetts. A distinguished environmental health scientist, Dr. Walker holds a master's degree in environmental health from the University of Michigan. He received, with honors, a Ph.D. degree in occupational and environmental health from the University of Minnesota.

Before coming to Massachusetts, Dr. Walker was Director of the Michigan Department of Public Health. Prior to that he served in the U. S. Department of Labor's Occupational Safety and Health Administration (OSHA) as director of Occupational Health Standards and was instrumental in the development of the nation's first policy for the classification and regulation of potential occupational carcinogens.

Dr. Walker also held positions of leadership in the health departments of Cleveland and Dayton, Ohio and the District of Columbia. He has had academic appointments in the Schools of Medicine and Public Health at the University of Minnesota, Howard University, Meharry Medical College, George Washington University, Michigan State University and the University of Michigan.

Among Dr. Walker's achievements are awards from the American Public Health Association, the National Environmental Health Association, the International Association of Environmental Health and Delta Omega, the national public health honor society. He has received special commendation from the U. S. Attorney General for his studies of the health effects of high density confinement in prisons. The results of these studies have been the basis for many court-ordered improvements in correctional institutions across the United States and for federal legislation. In addition, he has served on numerous advisory groups and study commissions, in both this country and Canada, on the subjects of toxic substances, environmental protection, animal vectors of disease and environmental conditions in prisons. He has also been on the Executive Board of the American Public Health Association and on the Editorial Board of the Journal of Public Health Policy.

In contrast to what has been referred to as the more bureaucratic approach of some of his predecessors, Dr. Walker's philosophy toward public health practice is based on science and technology. He is acutely aware of the role that the laboratory often plays in establishing a base-line for public health procedures, as was revealed in a recent communication from Dr. Walker to Dr. George Grady, Director of the State Laboratory Institute. He wrote, "Although research is needed and possible in all phases of public health, the laboratory can be particularly fruitful. An opportunity exists for both pure laboratory research and investigations carried on in conjunction with other functional divisions of the Department of Public Health or other community agencies. So I am appreciative of the need for a strong laboratory capability, of what can be accomplished by it and the benefit which the general public derives from such services."

Dr. Walker has reminded all employees within the Department that "The Massachusetts Department of Public Health is but one member of a large extended family concerned with matters of public health." He has encouraged us to consider our individual responsibilities as part of an interrelated system of activities under which we can cooperatively deal with specific public health problems.

We are encouraged by these statements and look forward with enthusiasm to a long and productive association with our new Commissioner.

AIDS (ACQUIRED IMMUNODEFICIENCY SYNDROME)
STATUS REPORT FOR LABORATORY AND OTHER HEALTH CARE PERSONNEL

Reports from the Centers for Disease Control in Atlanta (1-3) continue to show a doubling every six months in newly detected AIDS cases. Approximately 2000 cases have been seen since systematic reporting began in 1981. The survival time at which approximately half remain alive is only a year or less; thus less than 25% of patients remain alive at two years. Approximately 60% of cases have Pneumocystis carinii pneumonia (PCP) and have shorter survival times than the 33% who have Kaposi's sarcoma (KS). The remainder of patients have opportunistic infections other than PCP and as a group (15% of the total) partially overlap the two main groups (PCP and KS) which themselves overlap slightly (7.5%).

The disease continues to be concentrated among sexually active male homosexuals or bisexuals and users of intravenous injections. Although other epidemiologic groups contain less than 10 per cent of cases, these more unusual occurrences are being studied especially carefully in the hope that a useful clue will emerge to help explain the fundamental cause. Currently three major theories or schools of thought prevail:

1. Antigen overload.

   This theory posits that multiple allogeneic antigens contribute to a type of immune paralysis. Examples can be suggested for several populations. In male homosexuals, antigens of sperm or antigens of multiple venereal infectious agents have been invoked. Markers of infections with cytomegalovirus, Epstein Barr Virus, other herpesviruses and hepatitis B virus are nearly universal. Intravenous drug users have many of these same infections and are also known to inject multiple physical contaminants in the drugs used. Hemophiliacs are a particularly interesting group because of the thousands of foreign blood group antigens represented in the clotting factor preparations frequently received. Fifteen cases of AIDS in hemophiliacs have been reported to date. Some investigators have found that two defects characteristic of AIDS, diminished lymphocyte count and reduced ratio of helper/suppressor lymphocytes, are proportional to the duration and number of foreign antigen exposures.

2. Known pathogen expressed in an unusual way.

   Cytomegalovirus (CMV) and/or EB virus are principal actors in this model. Their nearly universal prevalence in AIDS high risk groups has been noted. In addition, genome sequences of CMV and possibly also of EBV have been identified in Kaposi sarcoma cells. Disseminated CMV infection is also known to be capable of inducing profound immunodepression; conversely, immunosuppressed individuals are especially susceptible to disseminated or reactivated CMV infection. Thus it is possible that multiple biologic insults, whether infectious or environmental, could evoke an atypical expression of CMV or other similar pathogens.

3. New agent or new contact with a sequestered agent.

   Hepatitis B is frequently used as the model for this theory. Although we now know that hepatitis B must have been endemic in Asia and Africa for a long time, only in the past several decades has it appeared to reach sustained epidemic proportions in industrialized societies. The increments, which many believe have not been merely the result of improved test methods, appeared to coincide with transfusion and dialysis practices, epidemic "recreational" intravenous drug use, and expanded opportunity for male homosexual transmission. The recent identification of the hepatitis B-associated co-infection with the "delta agent" (4) is an even more dramatic documentation of an infection thought to have a limited geographic distribution until recently picked up by epidemiologically linked individuals sharing intravenous injections.

The human T cell virus (HTLV) which has been thought to be endemic only in southern Japan and parts of the Caribbean, is another agent known to depress immunocompetence. The finding of unexpectedly frequent HTLV antibody among AIDS patients (5) raises the possibility that the agent has been "extracted" from its normally restricted endemic area, or that it is more ubiquitous but poorly expressed except when presented with "mainline" entry into the body through intravenous or ulcerated mucosal portals. As if these possibilities were not enough, there are a number of animal viruses known to produce disseminated infection and immunosuppression. Examples include African swine fever virus, feline leukemia virus, and canine venereal tumor virus. These have not been thought to be capable of adapting to man but mutations have been postulated.

Which of these theories will explain the enigma of AIDS is of more than academic interest to laboratories and others having contact with AIDS patients and their tissues. Only in the event that the AIDS agent turns out to be a truly new agent which can readily infect immunocompetent persons would there be a high risk to medical and laboratory contacts. Evidence to date has shown that the four cases of unexplained AIDS-like disease in health care workers are fewer than would be expected by chance alone considering the proportion of the total population that health care workers represent. Guidelines for precautions similar to those for hepatitis B have been published; prospective studies of persons sustaining accidental inoculations are being initiated. However, it is reassuring that transmission seems unlikely in the absence of base-line immunologic abnormality of the recipient, recurrent exposures, or massive exposure as may occur rarely via transfusion.

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1. CDC. Update: Acquired Immunodeficiency Syndrome (AIDS) - United States. MMWR 1983; 32:389-391.

2. CDC. An evaluation of the acquired immunodeficiency syndrome (AIDS) reported in health-care personnel - United States. MMWR 1983; 32:358-360.

3. CDC. Acquired immune deficiency syndrome (AIDS): Precautions for clinical and laboratory staffs. MMWR 1982; 31:577-580.

4. (Editorial) Delta agent — A virus in disguise? Lancet 1982; i:259-260.

5. Essex M, McLane MF, Lee TH, Falk L, Howe CWS, Mullins JI, and DP Francis. Antibodies to all membrane antigens associated with human T-cell leukemia virus in patients with AIDS. Science 1983; 220:859-862.

REAGENTS EVALUATION PROGRAM

The Centers for Disease Control have sent us information on two tests for detection of rubella antibody as follows:

SUPPLEMENT No. 20 May 9, 1983

To: Consumers and Manufacturers of *in vitro* Diagnostic Products

Subject: PHAST Test for Detection of Rubella Antibody

The PHAST Rubella Test, a passive hemagglutination test manufactured by Calbiochem-Behring Corporation, has been shown to be an acceptable test for qualitatively detecting rubella antibody to determine immune status. Test results obtained by the Center for Infectious Diseases (CID), Centers for Disease Control (CDC), agree with the clinical trial data the manufacturer presented in support of the qualitative use of this product. The claims and the clinical trial data, in summary form, are stated in the package insert accompanying the product.

The test is intended for use only as a screening procedure to detect the presence or absence of rubella antibodies. In studies to date, endpoint titrations using this test have not been sufficiently precise to allow accurate quantitation of antibody levels. The PHAST Test, therefore, should not be used for confirming acute rubella infection.

Nonsensitized control erythrocytes are available separately from the manufacturer as an additional optional control for the test. Studies to date indicate that approximately 1%-2% of random collected human sera show nonspecific agglutination with the control cells. The use of control erythrocytes is therefore recommended to minimize the reporting of false-positive results. (See note at top of page 5)

SUPPLEMENT No. 21 May 9, 1983

To: Consumers and Manufacturers of *in vitro* Diagnostic Products

Subject: Rubella Bio-EnzaBead Screen Test for Detection of Rubella Antibody

The Rubella Bio-EnzaBead Screen Kit, a solid-phase enzyme immunoassay test manufactu by Litton-Bionetics, Inc., has been shown to be an acceptable test for qualitatively detecting rubella antibody to determine immune status.Test results obtained by the Center for Infectious Diseases (CID), Centers for Disease Control (CDC), agree with the clinical trial data the manufacturer presented in support of the qualitative use of this product. The claims and clinical trial data, in summary form, are stated in the package insert accompanying the product.

A single dilution of 1:100 of serum is used in this screening test. At the 1:100 serum dilution, the amount of antibody detectable is approximately equivalent to a 1:8 serum dilution using the standard rubella HI test system. Using these cutoff levels, studies have shown a high degree of correlation of results between the Bio-EnzaBead test and the HI test. Results of the Rubella Bio-EnzaBead Screen Test are qualitative and should be reported as either positive or negative for rubella antibo

The Evaluation Branch, Biological Products Program, CID, is now accepting Rubella Test kits from the manufacturer for routine evaluation. Kits that meet CDC specifi tions will be identified by lot numbers in monthly reports. (See note at top of page

NOTE:

Although CDC neither recommends nor advises against the routine use of a new test, laboratory personnel working in laboratories authorized by their regulatory authorities, if any, to use the test for reporting clinical laboratory results may consider using it routinely. They should do the following before adopting this test:

1. Run the new test in parallel with the currently accepted test to show that the qualitative results with the new test are comparable to the qualitative results their laboratories obtain with their current test. If they wish, they should establish a basis for comparing the quantitative results of the new test with those of the currently accepted test.

2. Demonstrate proficiency in performing the new test on a continuing basis.

In addition, the Centers for Disease Control has recognized a new Standard Test for syphilis:

SUPPLEMENT No. 22 July 1, 1983

To: Consumers and Manufacturers of *in vitro* Diagnostic Products

Subject: Hemagglutination Treponemal Test for Syphilis (HATTS) is Given Standard Test Status as a Serologic Test for Syphilis

The HATTS kit, a treponemal serologic test for syphilis, manufactured by Difco Laboratories, has progressed from CDC Provisional Test Status to Standard Test Status. Laboratory data from comparative evaluation with the Fluorescent Treponemal Antibody Absorption (FTA-ABS) Test and Microhemagglutination Assay for Treponema pallidum Antibodies (MHA-TP) obtained by CDC's Treponema Research Branch, Sexually Transmitted Diseases Laboratory Program, Center for Infectious Diseases, are in agreement with clinical trial data presented by the manufacturer in support of claims for the product (Clin. Microbiol. 1981; 14:441-5).

Recent studies by Gary Friedly, California College of Medicine, University of California at Irvine, and Nelson P. Moyer et al., University Hygienic Laboratory, The University of Iowa, also support the manufacturer's claims for the HATTS. Publication of these studies is planned.

The HATTS, like all treponemal tests, is to be used only when there is an apparent discrepancy between the clinical history or symptoms of syphilis and the results of a reactive nontreponemal test. The test may also be used in the absence of a reactive nontreponemal test when late latent or late syphilis is suspected.

Laboratories unfamiliar with hemagglutination tests with avian cells may want to gain experience with HATTS before instituting the test as a standard technique in their laboratory. Training in the use of the HATTS is available from the Venereal Disease Training Section, Laboratory Program Office, CDC.

To assure equivalent quality among subsequent lots of reagents for the HATTS, the HATTS kits are accepted from the manufacturer by the Evaluation Branch, Biological Products Program, CDC for evaluation. Products that meet CDC performance specifications are identified by lot number in monthly reports.

A test system designated as a Standard Test has proven to be useful for medical management decisions. The HATTS is now recognized by CDC as a confirmatory test for reactive screening tests. The HATTS will be included in the next edition of the CDC Manual of Tests for Syphilis.

RECENT ADDITIONS TO AUDIO-VISUAL LIBRARY

The following slide-tape programs have been received by the State Laboratory Institute from the Centers for Disease Control and are now available for loan to persons employed in clinical laboratories, as well as those involved with education of clinical laboratory personnel. A sample order form for audio-visuals will be found on page 7 .

CATEGORY	NUMBER	TITLE OF UNIT
CRI	21	Electrophoresis: Principles and Applications. Part I: Principles and Theory of Electrophoresis. Joseph J. Cavalla Ph.D., 22 slides, 41 minute tape cassette, 4 page handout (CDC 82-83)
CRI	22	Laboratory Use of Radioactive Material. Part III. Radiation Contamination Surveillance. Dr. William M. Wagner, 25 slide 22 minute tape cassette, 7 page handout (CDC 81-118)
ISI	29	The Human Complement System. Part III: The Role of Complem in Human Disease and Host Defense Against Infection. Joseph J. Cavallaro, Ph.D. 8 slides, 40 minute tape cassett 7 page handout (CDC 81-82)
ISI	30	The Venereal Disease Research Laboratory (VDRL) Slide Test for Syphilis. Part III: The Qualitative and Quantitative Procedure on Serum. Ernest T. Creighton, B.S., M.P.H. 22 slides, 14 minute tape cassette, 6 page handout (CDC 81-
ISI	31	The Venereal Disease Research Laboratory (VDRL) Slide Test for Syphilis. Part IV: The Qualitative Test on Spinal Fluids. Ernest T. Creighton, B.S., M.P.H. - 16 slides, 9 minute tape cassette, 9 page handout (CDC 81-114)
MGT	22	Automatic Data Processing in Health Related Laboratories - Herbert L. Lawton, M.S. - 22 slides, 35 minute tape cassett 8 page handout (CDC 81-49)
MICRO	70	Preservation of Cells in the Frozen State. Harold C. Balle M.S., 36 slides, 12 minute tape cassette, 4 page handout (CDC 81-124)
MICRO	71	Reconstitution of Frozen Cells. Harold C. Ballew, M.S., 21 slides, 7 minute tape cassette, 4 page handout (CDC 81-1

A complete list of the audio-visual materials that may be borrowed is availab from the Laboratory Improvement Program, State Laboratory Institute, 305 South Str Jamaica Plain, MA 02130. Telephone: (617) 522-3700, Ext. 136.

A maximum of three programs may be borrowed at one time, with the loan period being 10 working days. Units are sent as close to the request date as possible. case of a long reserve list or delay, the person requesting the units will be contacted in order to make other arrangements.

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CATEGORY	NUMBER	TITLE OF UNIT	DATE NEEDED	# STUDY BOOKLETS DESIRED

will assume responsibility for the Audio-Visual Unit and will return it within the
esignated time period.

Signature ____________________

Date ____________________

LABORATORY IMPROVEMENT PROGRAM NEEDS YOUR HELP

The Laboratory Improvement Program has a library of more than 200 audio-visuals and videotapes available for loan to public and private laboratories, schools, hospitals and other institutions. These audio-visual aids cover a variety of subjects such as electrophoresis, radioimmunoassay, blood banking, serologic tests for a variety of bacteria and viruses, identification of dermatophytes and laboratory manage ment, to name a few. A list of titles is available on request.

We would like to hear from you, our readers, concerning the subjects that interest you. If there is a laboratory topic not covered on our lists, please let us know. We may be able to acquire a tape or slides on the subject for your viewin

Please refer requests for additional topics to Doris Johnson, State Laboratory Institute, 305 South St., Jamaica Plain, Mass. 02130. Tel. (617) 522-3700, Ext. 13

NCCLS BOARD OF DIRECTORS HOLDS LINE ON MEMBERSHIP DUES, RAISES PRICE OF DOCUMENTS

At its June meeting the National Committee for Clinical Laboratory Standards (NCCLS) Board of Directors voted to maintain the current level of active and corresponding membership dues for 1984.

A new single-copy price of $15.00 for all NCCLS documents was also approved by the Board, effective July 1, 1983. This increase is necessary to offset rapidly escalating production costs. The uniform price for all NCCLS documents takes into account the overall costs for developing NCCLS documents and obtaining voluntary con sensus, as well as for printing and mailing.

To accommodate users who may wish to obtain multiple copies of a single docu ment, the following discounts will apply:

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NCCLS is an interdisciplinary, nonprofit organization whose purpose is to provide a forum for and promote the development and use of national and internationa standards for the clinical laboratory. NCCLS is based on the principle that voluntary consensus standards for the clinical laboratory are necessary in order to maintain laboratory performance at levels that ensure high quality patient care. NCCLS member organizations constitute a balanced representation of the professional sector government and industry. For further information, contact: Joan Logue, Administrati Director, NCCLS, 771 E. Lancaster Ave., Villanova, PA 19085.

MORBIDITY AND MORTALITY WEEKLY REPORT

LAB NEWS recipients will be happy to learn that the Morbidity and Mortality Weekly Report (MMWR) published by the U. S. Public Health Service, Centers for Disease Control is now being offered on a non-profit, at-cost basis for only $20.00 a year. Beginning with the July 1, 1983 issue, Massachusetts Medical Society Publications, publisher of the New England Journal of Medicine, has reprinted and distributed the report weekly to a growing number of subscribers.

This weekly bulletin is an invaluable source of current information on what is happening in the field of public health. It offers an update on communicable diseases and environmental health hazards as well as on developments in laboratory science in a concise highly readable format.

For over a hundred years MMWR was mailed by the federal government free-of-charge to anyone who asked for it. As of last November, due to budgetary constraints, subscription charges were instituted by CDC. The annual prices charged by them are $70.00 for third-class mailing; $90.00 for first-class. These high prices forced most readers to cancel their subscriptions.

For those readers who might want to subscribe to MMWR through the New England Journal of Medicine, we are reproducing their subscription order form, below. Please allow 4-6 weeks from the time your order is received until the mailing of the first issue of your subscription.

Send entire form and payment to: **MMS Publications**
C.S.P.O. Box 9120
Waltham, MA 02254 U.S.A.

The MMWR is available on a *one-year basis only.* All orders must be *prepaid.* No billed orders can be accepted (added processing costs would make low subscription rates impossible). Make all checks payable to: **MMS Publications**

MMWR *supplements:* MMWR expects to publish 4 to 8 supplements during the course of a yearly subscription. These will be mailed only to subscribers who remit the small additional fee for these publications.

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SELECTED ARTICLES FROM MMWR

The article below is an Editorial Note which appeared in Morbidity and Mortality Weekly Report (MMWR) following the report of 2 cases of blood donors infected with malaria (Pennsylvania and Georgia) which had been serologically identified at CDC.

TRANSFUSION MALARIA

Editorial Note: Transfusion malaria occurs very infrequently in the United States. Between 1958 and 1976, the annual rate of transfusion-related cases was between 0 and 4.9 cases per million persons transfused (1), and has remained within this range through 1982. Estimates based on the number of units of blood collected in the United States since 1972 indicate that 0.25 cases of transfusion malaria have occurred per million units collected (2).

Because parasite density in an infected donor may be very low, there may be n clinical history of recent febrile illness or elevated temperature when blood is donated, and an infected individual may slip through the donor screening process. These two cases demonstrate that a thick blood film examination may also be a very insensitive screening procedure (3).

To protect recipients of red-blood-cell-containing products from inadvertentl acquiring malaria, the American Association of Blood Banks (AABB) has set the follo ing standards for donors who have traveled to or lived in endemic areas (4).

1. Travelers may donate blood 6 months after returning from endemic areas if they have been free of symptoms and have not taken antimalarial drugs.
2. Persons who have had malaria or who had been taking chemoprophylaxis shal be deferred from donating blood for 3 years after either becoming asymptomatic or stopping therapy or chemoprophylaxis.
3. Immigrants or visitors from endemic areas may be accepted as donors 3 year after departure if they are asymptomatic in the interim.
4. Donations to be used in preparing plasma, plasma components, or derivative devoid of intact red blood cells are exempted from these restrictions.

Proven carriers of malaria or persons who had malaria caused by P. *malariae* a excluded permanently from donating blood.

The 3-year limit has been established because infections with the relapsing forms of malaria (P. *vivax* and P. *ovale*) rarely persist more than 3 years after a naturally-acquired infection; non-relapsing malaria due to P. *falciparum* will generally present clinically within 3 months of the initial infection, but a semi-immun person may have an asymptomatic infection for a year or more. However, despite the AABB standards, some cases of transfusion malaria will continue to occur, because P. *malariae* (the most common cause of transfusion malaria, now considered a non-relapsing parasite) may remain undetected in the blood for many years. This was illus trated by case 1. Persons who might otherwise be excluded can slip through the scre ing process; the donor in case 2 left Sierra Leone less than 3 years before giving blood; apparently, this information was not noted at the time of donation.

Thus, it is important to maintain vigilance in screening blood donors, promptl diagnose suspected transfusion cases, and rapidly identify and treat the donor respo sible for the infection. Because an IFA response is usually associated with current prior malaria infection, serologic testing is a useful adjunct to the travel or exposure histories in identifying donors potentially responsible for transfusion-relat malaria.

In 1982, to provide a more rapid and efficient response for malaria reference diagnosis, CDC reviewed the indications for which malaria IFA serologic testing is appropriate. The review noted that a diagnosis of acute malaria is best made by a properly collected, stained, and examined blood smear. Therefore, the major criteria for reference diagnostic serologic testing for malaria antibodies at CDC are: 1) identification of a donor for each transfusion-related case, and 2) assistance in diagnosing clinically suspected malaria in a patient for whom repeated blood smears have been negative. In addition, CDC can assist other laboratories in standardizing test reagents and procedures for malaria serology.

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4. American Association of Blood Banks. Standards for blood banks and transfusion services. 10th ed. Washington, D.C. American Association of Blood Banks, 1981.

From MMWR 1983; 32: 222

SMALLPOX VACCINE NO LONGER AVAILABLE FOR CIVILIANS - UNITED STATES

In May 1983, Wyeth Laboratories, Inc., discontinued general distribution of smallpox vaccine; production for general use was discontinued in 1982. Wyeth is the only active, licensed producer of smallpox vaccine in the United States.

Wyeth continues to produce smallpox vaccine for the Department of Defense, which routinely vaccinates all its active duty personnel.

(Reported by International Health Program Office; Center for Infectious Diseases; Quarantine Div. Center for Prevention Svcs, CDC.)

Editorial Note: The non-availability of smallpox vaccine for the civilian population should end its misuse in attempts to treat or prevent diseases such as herpes (1,2).

The only non-military persons for whom smallpox vaccination is recommended are laboratory workers exposed to orthopox viruses (including variola, vaccinia, and monkeypox) (3). Means to assure the continued availability of smallpox vaccine to protect these workers are being developed.

References

1. CDC. Vaccinia necrosum after smallpox vaccination - Michigan, MMWR 1982;31:501
2. Food and Drug Administration. Inappropriate use of smallpox vaccine. FDA Drug Bulletin 1982; 12:12.
3. Immunization Practices Advisory Committee. Smallpox vaccine. MMWR 1980; 29:417-20

From MMWR 1983; 32: 387.

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TRICHOMONAS VAGINALIS IN RESPIRATORY TRACT OF INFANTS

BY BARBARA ROSENAU, SC.D.

A recent report(1) suggests that *Trichomonas vaginalis* may be implicated in respiratory infections of the newborn.

Two cases are described in infants born prematurely to mothers who had receive no prenatal care. Trichomonads had been identified on wet preparations on several occasions in both women.

In case 1, twenty-six hours after vaginal delivery the child developed severe respiratory distress and was placed on a ventilator where she remained for 41 days. A chest roentgenogram on day 1 showed diffuse bilateral lung infiltrates. No bacte al pathogens or viruses were cultured from tracheal aspirates but *Trichomonas sp.* wa recovered. On day 32 the patient was treated with metronidazole 15 mg/kg/d for 10 days. By day 41 the chest x-ray was normal and Trichomonas was no longer isolated. The patient went home on day 47 and remained well.

Case 2 showed respiratory distress and was intubated and placed on a respirator during his first day of life. Bacterial cultures of blood and CSF were negativ Pneumonia was not demonstrated in a roentgenogram. After slow improvement, he was discharged at three weeks of age. At 8 weeks of age the child developed nasal stuf ness and rhinitis which persisted and he was again hospitalized at 10 weeks of age. No bacterial or viral pathogens were isolated but Trichomonas was recovered from th nasopharynx. At 11 weeks of age chest x-rays showed bilateral upper lobe infiltrates. The child improved slowly without treatment and was discharged at 13 weeks of age. During a two year follow-up period he had no serious upper respiratory tract infections.

The trichomonads isolated in case 1 were identified at the Centers for Disease Control (CDC) in Atlanta as *T.vaginalis* The Trichomonas organisms isolated from case 2 appeared to be morphologically identical with *T.vaginalis* but were not viabl for identification at the CDC.

Twenty-five percent of pregnant women have vaginal infections from *T.vaginali* The possibility that the organism may cause perinatal respiratory tract disease in infants is intriguing and should be studied further.

1. McLaren, L. C., Davis, L. E., Healy, G. R., and James, C. G. Pediatrics 1983; 71: 888-890.

STATE LICENSING OF LABS BEGINS

On Tuesday, June 14, 1983, the Massachusetts Public Health Council (PHC) voted to issue licenses to 35 clinical laboratories that had been recommended for licensure by the Division of Health Care Quality. This is the first group of licenses that has been issued under G.L., Chapter 111D. The names of additional laboratories are being submitted to the PHC each month.

The Division is implementing the licensing in several Phases. Phase I, to be completed by the end of calendar year 1983, will include the licensing of all Medicare-certified and/or CLIA (Clinical Laboratory Improvement Act of 1967) licensed laboratories. Phase II will license physicians' office laboratories wher there are 3 or more physicians in practice.

CALENDAR OF MEETINGS AND TRAINING EVENTS

FOR

CLINICAL LABORATORY PERSONNEL

September 15, 1983

CURRENT CONCEPTS IN CLINICAL MICROBIOLOGY

Sponsors: Massachusetts Laboratory Improvement Program and the American Society for Microbiology.

Level of Training: Intermediate.

Faculty: James W. Snyder, Norton Children's Hospital, Inc., Louisville, Kentucky, and Susan B. Overman, University of Kentucky Medical Center, Lexington, Kentucky.

Content: This one-day lecture workshop will cover current concepts under 4 major headings:

1) Specimen Collecting; 2) Sexually Transmitted Diseases; 3) Interpretation of Respiratory Specimens Utilizing Gram Stain; 4) Anaerobes.

CEU: 0.7 Continuing Education Units (CEU's) will be available to those who attend all sessions and successfully complete the workshop.

Fee: $75.00 for ASM members; $100.00 for non-members. Make checks payable to the American Society for Microbiology.

A registration form will be found on page 15 . Applicants will be accepted on a first come - first served basis.

Contact: Doris Johnson at the State Laboratory Institute (617) 522-3700, Ext. 135.

October 5, 1983 (Jamaica Plain, MA)
October 6, 1983 (Springfield, MA)

MICROCOMPUTERS IN THE CLINICAL LABORATORY

Sponsors: Bay State Medical Center, Massachusetts Laboratory Improvement Program, Massachusetts Health Research Institute, Inc. and Fisher Scientific Company.

Detailed information about this workshop will be mailed to all Massachusetts laboratories shortly.

Contact: Doris Johnson at the State Laboratory Institute (617) 522-3700, Ext. 135.

November 2 & 3, 1983 (1½ days)

DIAGNOSIS OF THE MALARIA PARASITE

Sponsors: Massachusetts Laboratory Improvement Program and the American Society for Microbiology.

Level of Training: Intermediate to Advanced. (Participants must have basic knowledge of the characteristics and life cycle of the malaria parasite).

Faculty: Dean "Ike" Armstrong of the Washington Hospital Center, Washington, D.C.

Content: This workshop will cover current procedures recommended for the detection and indentification of the malaria parasite. The program will be directed to those who desire to improve their competence and knowledge in the collection, preparation and examination of blood specimens for microscopic diagnosis of malaria. Current prophylaxis and treatment regimens will also be presente

CEU: 0.925 Continuing Education Units (CEU's) will be available to those who attend all sessions and successfully complete this workshop.

Fee: $125.00 for ASM members; $150.00 for non members. Make checks payable to the American Society for Microbiology.

A registration form will be found on page 15. Applicants will be accepted on a first come - first served basis.

Contact: Doris Johnson at the State Laboratory Institute.
(617) 522-3700, Ext. 135.

December 8 & 9, 1983

IDENTIFICATION OF GLUCOSE NONFERMENTING GRAM-NEGATIVE RODS

Sponsors: Massachusetts Laboratory Improvement Program and the American Society for Microbiology.

Level of Training: Advanced. (Participants should have experience in diagnostic bacteriology, including the identification of glucose nonfermenting Gram-negative rods).

Faculty: Dr. Gerald L. Gilardi, North General Hospital Department of Laboratories, New York, New York.

Content: This 2-day, lecture/laboratory workshop is designed to demonstrate the identification of glucose nonfermenting Gram-negative rods encountered in clinical bacteriology and to distinguish them from glucose fermenters. Topics to be covered include minimal characteristics for laboratory identification, nomenclature, antibiograms, ecology, and clinical significance. The indophenol oxidase test, hanging drop preparation for motility, and flagella stain will be described and performed by the students in the laboratory. From demonstrations, the students will be asked to identify 20 representative strains of nonfermenters including Pseudomonas, Comamonas, Flavobacterium, Acinetobacter, Moraxella, Alcaligenes, Achromobacter, Bordetell and related groups.

CEU: 1.45 Continuing Education Units (CEU's) will be available to th who attend all sessions and successfully complete this workshop.

Fee: $125.00 for ASM members; $150.00 for non members. Make checks payable to the American Society for Microbiology.

A registration form will be found on page 15. Applicants will be accepted on a first come - first served basis.

Contact: Doris L. Johnson at the State Laboratory Institute.
(617) 522-3700, Ext. 135.

REGISTRATION FORMS FOR ASM TRAVELING WORKSHOPS

Mail application with the appropriate fee and two (2) self-addressed mailing labels to: CONTINUING EDUCATION PROGRAM, AMERICAN SOCIETY FOR MICROBIOLOGY, 1913 EYE STREET, N.W., WASHINGTON, D.C. 20006.

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1. Please register me for the workshop "CURRENT CONCEPTS IN CLINICAL MICROBIOLOGY." September 15, 1983, at the State Laboratory Institute, Jamaica Plain, Massachusetts. ASM Members $75 - Non-members $100. (Make checks payable to the AMERICAN SOCIETY FOR MICROBIOLOGY).

Name: (please print): ______________________ Telephone (Day #) ____________

Address: ____

____

All fees (minus a $5.00 handling charge) will be refunded if a registrant cancels on or before September 1, 1983.

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2. Please register me for the workshop "DIAGNOSIS OF THE MALARIA PARASITE," November 2-3, 1983, at the State Laboratory Institute, Jamaica Plain, Massachusetts. ASM Members $125 - Non-Members $150. (Make checks payable to the AMERICAN SOCIETY FOR MICROBIOLOGY).

Name: (please print): ______________________ Telephone (Day #) ____________

Address: ____

____

All fees (minus a $5.00 handling charge) will be refunded if a registrant cancels on or before October 19, 1983

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3. Please register me for the workshop "IDENTIFICATION OF GLUCOSE NONFERMENTING GRAM-NEGATIVE RODS," December 8-9, 1983, at the State Laboratory Institute, Jamaica Plain, Massachusetts. ASM Members $125 - Non-Members $150. (Make checks payable to the AMERICAN SOCIETY FOR MICROBIOLOGY).

Name: (please print): ______________________ Telephone (Day #) ____________

Address: ____

____

All fees (minus a $5.00 handling charge) will be refunded if a registrant cancels on or before November 23, 1983.

CONTINUING EDUCATION COURSES FOR CLINICAL LABORATORY PERSONNEL
SCHEDULED TO BE HELD AT CDC, ATLANTA, GEORGIA

The courses listed below will be presented by the Laboratory Program Office of the Centers for Disease Control at their facility in Atlanta, Georgia. These courses are designed for experienced, professional laboratory workers. Prerequisites generally include college-level training either in the specialty involved or in certain biological sciences, and diagnostic experience that has included handling cultures of live pathogenic organisms.

HOW TO APPLY: Application for enrollment in each course is to be made on a separate form. A sample form is included in this issue of LAB NEWS, following the list of courses

Applications by employees of Federal agencies must be approved by a supervisor, commanding officer, or hospital administrator-whichever is appropriate for the applicant's organization-before awarding to CDC.

Applications by employees of non-Federal agencies must be submitted to the State Laboratory Director of the State in which the applicant works, for review and approval. If approved, the State official will forward the form to CDC. In Massachusetts, the form should be sent to George F. Grady, M.D., Director, State Laboratory Institute, 305 South Street, Jamaica Plain, MA 02130.

Applications are reviewed 8 weeks before each course begins. Applicants are notified of the reviewers' decision shortly thereafter.

FEES: Fees are charged for employees or representatives of private entities and international governmental and non-governmental entities who attend training courses conducted by CDC. Other types of employees should request a waiver of the fee. DO NOT send the fee when applying. Those who are accepted for training will be billed when accepted.

CREDIT: Continuing education units (CEU), awarded by Georgia State University, are the usual mode of credit for completing these courses. One such unit represents ten contact hours of instruction; fewer than ten hours are represented by pro rata decimal fractions of a unit.

CDC COURSES SCHEDULED THROUGH DECEMBER 16, 1983

Nov. 14-18	Isotopic and Nonisotopic Immunoassays (9432-C) Closing Date: September 19, 1983 Tuition: $220	1 wk
Nov. 28-Dec 1	Principles and Techniques for Enzyme Immunoassay (9418-C) Closing Date: October 3, 1983 Tuition: $176	4 days
Nov 28-Dec 2	Principles and Bacterial Applications of Fluorescent Antibody Techniques (8440-C) Closing Date: October 3, 1983 Tuition: $220	1 wk
Dec 5-9	Identification of Pathogenic Fungal Isolates by Immunodiffusion (8175-L) Closing Date: October 10, 1983 Tuition: $220	1 wk
Dec 12-16	Immunofluorescence Methods in Virology (8231-C) Closing Date: October 17, 1983 Tuition: $220	1 wk

PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL
LABORATORY PROGRAM OFFICE
ATLANTA, GEORGIA 30333

APPLICATION FOR LABORATORY TRAINING

1. NAME AND ADDRESS OF APPLICANT (Please Type or Print):

Dr. Mr. Mrs. Ms. (Last) (First) (Middle Initial)

Home (or office) Address

City/State

Zip Code or County

2. COURSE DESIRED: No. Date

Title

Location

3. PREVIOUS RELATED COURSES (List Most Recent First):

Date	Title	Institution

4. EMPLOYER: ☐ Federal ☐ State ☐ Local Government ☐ Other

Organization

Division/Unit

Local Address

City/State or County

ZIP Code ______ Applicant's Office Phone ______
(Area Code & No.)

5. PROFESSIONAL STATUS:

Occupation

Position Title

Brief Description of Your Present (or Expected) Position

Length of Time in Position ______, & in Profession ______

6. EDUCATION ☐ High School

Name of College(s)	No. Yrs. Completed	Date (Yr.) Completed	Degree/Major

Other Training (Including Certification)

(Signature of Applicant) (Date)

(Name & Title of Approving Supervisor) (Date)

INSTRUCTIONS - LABORATORY COURSES

Please read again the course description and eligibility requirements.

When responding to Item 5 of the application, describe briefly your past experience and present major duties giving some idea of your job responsibilities, current workload, procedures used, instrumentation, etc., (as appropriate for the course in which you are interested), and how you expect to use the training (refer to course description) in your work or in training others.

The information requested on this form is collected under the authority of 42 U.S.C. 243. The requested information is used only to process and evaluate your application for training, and may be disclosed (for verification purposes) to your employer, educational institution, etc., as necessary. Furnishing the information requested on this form is voluntary. No applicant may be accepted for training unless a completed application form is received.

FOR CDC LABORATORY COURSES ONLY - Non-Federal applicants must forward application to State Laboratory Director for approval.

(State Laboratory Director) (Date)

CDC 32.1 4-81(Formerly 0.759C)

FORM APPROVED OMB NO. 0920-0017

STATE AND TERRITORIAL PUBLIC HEALTH LABORATORY DIRECTORS

ALABAMA
Dir, Clin Lab Adm
St. Dept of Pub Hlth
University Dr.
Montgomery, AL
36130

ALASKA
Ch, Sect of Labs
Alaska Div of Pub
Hlth
Pouch H 06 D
Juneau, AK 99811

ARIZONA
Ch, Bur of Lab Svcs
Az Dept of Hlth Svcs
1520 West Adams St
Phoenix, AZ 85007

ARKANSAS
Dir, Div of Pub Hlth
Labs
4815 W. Markham St.
Little Rock, AR
72201

CALIFORNIA
Ch, Lab Svcs Br
Ca Dept of Hlth
2151 Berkeley Way
Berkeley, CA 94704

COLORADO
Dir, Div of Labs
Dept of Pub Hlth
4210 E. 11th Ave.
Denver, CO 80220

CONNECTICUT
Dir of Labs
St. Dept of Hlth
P.O. Box 1689
Hartford, CT 06101

DELAWARE
Dir, Div of Pub Hlth
Labs
Jesse S. Cooper Mem
Bldg
Capitol Square
Dover, DE 19901

D.C.
Lab Dir
D.C. Dept of Human
Svcs
300 Indiana Ave, NW,
Rm 6154
Washington, DC
20001

FLORIDA
Dir, Office of Lab
Svcs
Dept of Hlth & Rehab
Svcs
P.O. Box 210
Jacksonville, FL
32231

GEORGIA
Dir of Labs
Ga Dept of Human
Resources
47 Trinity Ave
Atlanta, GA 30334

GUAM
Lab Dir
Pub Hlth & Soc
Svcs
P.O. Box 2816
Agana, GU 96910

HAWAII
Ch, Labs Br
St Dept Of Hlth
P.O. Box 3378
Honolulu, HI 96801

IDAHO
Ch, Bur of Labs
Dept of Hlth &
Welfare
2220 Old Penitentiary
Rd.
Boise, ID 83701

ILLINOIS
Dir, Div of Labs
Il Dept of Pub Hlth
525 W. Jefferson
4th Fl
Springfield, IL 62761

INDIANA
Dir Bur of Labs
St. Bd. of Hlth
1330 W. Michigan St
Indianapolis, IN
46206

IOWA
Dir, Univ. Hygienic
Lab
Univ of Iowa
Iowa City, IA 52242

KANSAS
Dir, Off of Labs &
Res
Dept of Hlth &
Envrnmt
Forbes Bldg 740
Topeka, KS 66620

KENTUCKY
Dir, Div of Lab Svcs
Dept for Hlth Svcs
Cab for Human Res
275 E. Main St.
Frankfort, KY 40621

LOUISIANA
Dir, Bur of Labs
Off. of Hlth Svcs &
Env Qlty
La St Dept of Hlth
325 Loyola Ave,
7th Fl
New Orleans, LA
70112

MAINE
Dir, Pub Hlth Lab
Dept of Human Svcs
State House
Station No. 12
Augusta, ME 04333

MARYLAND
Dir, Labs Adm
St Dept of Hlth &
Mental Hygiene
P.O. Box 2355
Baltimore, MD 21203

MASSACHUSETTS
Dir, St Lab Inst
Dept of Pub Hlth
305 South St.
Jamaica Plain, MA
02130

MICHIGAN
Lab Dir, Lab & Epi
Svcs Adm
Mich Dept of Pub
Hlth
P.O Box 30035
Lansing, MI 48909

MINNESOTA
Dir, Div of Med Labs
Mn Dept of Hlth
717 Delaware St. S.E.
Minneapolis, MN
55440

MISSISSIPPI
Dir, Pub Hlth Labs
St Bd of Hlth
P.O. Box 1700
Jackson, MS 39205

MISSOURI
Dir, Bur of Lab Svcs
Mo. Div of Hlth
307 W. McCarty
Jefferson City, MO
65101

MONTANA
Ch, St Micro Lab
St Dept of Hlth &
Env Sci
Cogswell Bldg
Helena, MT 59620

NEBRASKA
Dir of Labs
St Dept of Hlth
P.O. Box 2755
Lincoln, NE 68502

NEVADA
Adm, Nv St Hlth Lab
Dept of Human Res
1660 N. Virginia St.
Reno, NV 89503

NEW HAMPSHIRE
Dir, Diagnostic Labs
Div of Pub Hlth
St Lab Bldg
Hazen Dr
Concord, NH 03301

NEW JERSEY
Dir of Labs
St Dept of Hlth
P.O. Box 1540
Trenton, NJ 08625

NEW MEXICO
Dir, Sci Lab Div
Hlth & Env Dept
700 Camino de Salud,
NE
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87106

NEW YORK
Dir, Div of Labs &
Research
St Dept of Hlth
Tower Bldg
Empire State Plaza
Albany, NY 12201

NORTH CAROLINA
Dir, Pub Hlth Lab
St Bd of Hlth
P.O. Box 28047
Raleigh, NC 27611

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58502-1618

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Labs
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Columbus, OH 43216

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1717 S.W. 10th Ave
Portland, OR 97201

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Dir, Bur of Labs
Pa Dept of Hlth
Pickering Way &
Welsh Pool Rd
Lionville, PA 19353

PUERTO RICO
Dir, Inst of Hlth Labs
Dept of Health
Bldg A — Box 70184
San Juan, PR 00922

RHODE ISLAND
Assoc Dir, Div of
Labs
Health Lab Bldg
50 Arms St.
Providence, RI
02904

SOUTH CAROLINA
Ch, Bur of Labs
Dept of Hlth & Env
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P.O. Box 2202
Columbia, SC 29202

SOUTH DAKOTA
Dir, St Hlth Lab
Hlth Lab Bldg
Pierre, SD 57501

TENNESSEE
Dir, Div of Lab Svcs
Tn Dept of Pub Hlth
Cordell Hull Bldg
Rm 425
Nashville, TN 37219

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Tx Dept of Hlth
1100 W. 49th St
Austin, TX 78756

UTAH
Dir, Utah St Hlth
44 Medical Dr, Rm
207
Salt Lake City, UT
84113

VERMONT
Dir, St Pub Hlth L
St Dept of Hlth
115 Colchester Av
Burlington, VT 05

VIRGINIA
Dir, Bur of Micro.
Div of Consolidat
Lab Svcs
Dept of General S
Box 1877
Richmond, VA 23

VIRGIN ISLAND
Dir of Pub Hlth L
P.O. Box 8585
St. Thomas, VI
00801

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Ch, Lab Sect
St Dept of Social
Hlth Svcs
1409 Smith Tow
Seattle, WA 9810

WEST VIRGINIA
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167 11th Ave
So. Charleston,
WV 25303

WISCONSIN
Dir, St Lab of Hy
Wm. D. Stovall B
465 Henry Mall
Madison, WI 537

WYOMING
Dir, Pub Hlth La
Svcs
Div of Hlth & Me
Svcs
St Office Bldg
Cheyenne, WY 8

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HEALTH & HUMAN SERVICES
Public Health Service
Centers for Disease Control
Atlanta GA 30333

Official Business

PLACE
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Laboratory Program Office
Attn: Gloria A. Kovach
Centers for Disease Control
Atlanta, GA 30333

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